AMENDMENTS TO THE CLAIMS

1. **(Currently amended)** A method for detecting antigen-specific, activated lymphocytes in an organism, comprising:

exposing test lymphocytes from said organism to a target antigen in a medium for cell culture in the presence of neutralizing antibodies against cytokines which can induce cell proliferation, wherein the target antigen is selected from the group consisting of a human histocompatibility antigen, an allogeneic antigen, a heteroantigen, a viral antigen and a bacterial antigen;

determining activity in said test lymphocytes and in control lymphocytes from said organism by measuring a detectable signal, wherein said control lymphocytes are exposed to an irrelevant antigen or no antigen in the presence of neutralizing antibodies against cytokines which can induce cell proliferation; and

comparing activity of the test and control lymphocytes, wherein a lower activity of the test lymphocytes compared to the control lymphocytes is indicative of antigen-specific activated lymphocytes in the organism.

2. **(Canceled)**

3. **(Previously presented)** The method of claim 1, wherein the target antigen is a particulate antigen or soluble antigen; and wherein the human histocompatibility antigen is either one of the HLA type I or type II antigens, or a mixture of HLA type I antigen and HLA type II antigen.

4. **(Previously presented)** The method of claim 1, further comprising adding an immunosuppressive agent and/or an anti-cancer medicament to said test and control lymphocytes, wherein the amount of the immunosuppressive agent or anti-cancer medicament is 0.001 ng-100 μg/ml medium and the amount of the cytokine neutralizing antibody is 1 μg-10 mg/ml medium.

5. **(Previously presented)** The method of claim 1, wherein the detectable signal is measured by a method selected from the group consisting of MTT colorimetry, cell staining, fluorescent antigen staining and enzyme linked immunosorbent assay.

6. **(Previously presented)** The method of claim 4, wherein the immunosuppressive agent is selected from the group consisting of Prograf (FK506), Cyclosporins, cyclophosphamide, azathioprine, rapamycin, RS-61443, BQR, immunosuppressant secreted by human acute T

lymphocytic leukemia cell strain JM, deoxyspergualin, and adrenal cortex hormone, and wherein the anti-cancer medicament is selected from the group consisting of a topoisomerase inhibitor, an alkyling agent, an antimetabolite, and a derivative of retinoic acid-vitamin A.

7. **(Currently amended)** The method of claim 6, wherein the immunosuppressive agent[[s]] and the anti-cancer medicament[[s]] are used alone or in combination.

8. **(Previously presented)** The method of claim 6, wherein the adrenal cortex hormone is selected from the group consisting of medrat, prednisone, hydrocortisone and dexamethasone.

9. **(Previously presented)** The method of claim 6, wherein the Cyclosporin is selected from the group consisting of Cyclosporin A and Cyclosporin C.

10. **(Previously presented)** The method of claim 4, wherein the cytokines which can induce cell proliferation are selected from the group consisting of interleukin 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, and 23, α-interferon, β-interferon, ω-interferon, γ-interferon, granulocyte colony-stimulating factor, macrophage colony stimulating factor, granulocyte-macrophage colony stimulating factor, stem cell factor and thrombopoietin.

11-23. **(Canceled)**